

REMARKS

Applicant appreciates the Examiner's thorough consideration provided in the present application. Claims 4-10 are currently pending in the instant application. Claims 4 and 7 are independent. Claims 1-3 have been cancelled. Reconsideration of the present application is earnestly solicited.

Priority

Applicant appreciates the Examiner's acknowledgment of the receipt of the corresponding certified copy of the priority document.

Minor Informalities

In order to expedite the prosecution of the present application, Applicant has provided a replacement Abstract of the Disclosure to address potential informalities.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kasuya (U.S. Patent No. 5,930,054). This rejection is respectfully traversed.

In light of the foregoing amendment to the claims, Applicant submits that these rejections have been obviated and/or rendered moot. Without conceding the propriety of the Examiner's rejections, but merely to timely advance the prosecution of the present application, claims 1-3 have been cancelled. In

addition, Applicant respectfully submits that the prior art of record fails to teach or suggest each and every limitation of the unique combination of elements of the claimed invention of claims 4-10. Accordingly, this rejection should be withdrawn.

With respect to claim 4, Applicant submits that the prior art of record fails to teach or suggest the unique combination of elements of the claimed invention, including the limitation(s) of “wherein. . . *since the position determining device is turned on until the absolute position determiner detects the subject being at a limit of the movement range; the position determining device determines the position of the subject in accordance with data outputted from the absolute position determiner. . . and after the absolute position determiner detects the subject being at the limit of the movement range, the reference point for determination of the relative position determiner is established at the limit of the movement range of the subject, and the position determining device determines the position of the subject in accordance with data outputted from the relative position determiner.*” (emphasis added) Accordingly, this rejection should be withdrawn.

With respect to claim 7, Applicant submits that the prior art of record fails to teach or suggest the unique combination of elements of the claimed invention, including the limitation(s) of “a storage device for previously storing standard output data of the absolute position determiner corresponding to a plurality of positions of the subject within the movable range, and previously

storing standard output data of the relative position determiner corresponding to the standard output data of the absolute position determiner, the reference point for the standard output data of the relative position determiner being established at a limit of the movement range of the subject; *wherein, upon being turned on, the position determining device obtains data outputted from the absolute position determiner, then reads, from the storage device, the standard output data of the relative position determiner corresponding to the obtained data outputted from the absolute position determiner thereafter determines the position of the subject in accordance with data outputted from the relative position determiner with reference to the read standard output data of the relative position determiner.*" (emphasis added) Accordingly, this rejection should be withdrawn.

In Kasuya, an arithmetic unit 12 first causes a lens 14 to be driven to a wide-angle-side target position O_w , e.g., a predetermined position set beforehand at a point near to an optical wide-angle end point P_w , in accordance with a detection signal from an absolute position detecting means 16 when a power supply is turned on. Then, the arithmetic unit 12 causes the lens 14 to be driven to a wide-angle end point P_w of the driving range according to a detection signal from a relative position detecting means 17. At a point where an end-point position signal outputted from the wide-angle end point detecting means 22 is detected, a value of a counter 20 is stored in a storage

device 18, and the counter 20 is initialized (see Col. 4 lines 1-23, and lines 44-54 of Kasuya).

After that, the lens 14 is driven to a telephoto-side target position Ot, e.g., a predetermined position set beforehand at a point near to art optical telephoto end point Pt. The lens 14 is further driven to a telephoto end point Pt by using a signal coming from the relative position detecting means 17 (see Col. 6 lines 2-10). When an end-point position signal from the telephoto end point detecting means 21 is detected, a count value of the counter 20 is obtained and then stored in the storage device 18. With this process, the end position is set for use in the relative position detecting means 17.

In contrast, the lens in the claimed invention of claim 4 is driven to a limit of a movement range according to a signal outputted from an absolute position determiner when a power supply is turned on. After the absolute position determiner detects the subject reaching the limit of the movement range, the reference point is established at the limit of the movement range of the subject, so that data outputted from a relative position determiner is used effectively. However, Kasuya fails to teach or suggest this unique combination of control features.

With respect to claim 7, a storage device previously stores data representing a relationship between the absolute position determiner and the relative position determiner; standard output data of the absolute position determiner corresponding to a plurality of positions of the subject within the

movable range; and standard output data of the relative position determiner corresponding to the standard output data of the absolute position determiner. When the power supply is turned on, a position determining device determines the position of the subject in accordance with the data outputted from the absolute position determiner, and the relative position determiner is initialized correspondingly to the present position of the subject in accordance with the data stored in the storage device. Applicant respectfully submits that Kasuya fails to teach or suggest the unique initialization process of the relative position determiner of claim 7.

In accordance with the above discussion of the patents relied upon by the Examiner, Applicant respectfully submits that these documents, either in combination together or standing alone, fail to teach or suggest the invention as is set forth by the claims of the instant application.

Accordingly, reconsideration and withdrawal of the claim rejection are respectfully requested. Moreover, Applicant respectfully submits that the instant application is in a condition for allowance.

As to the dependent claims, Applicant respectfully submits that these claims are allowable due to their dependence upon an allowable independent claim, as well as for additional limitations provided by these claims.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but rather to merely show the state-of-the-art, no further comments are necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.


Attached hereto is a marked-up version of the changes made to the application by this Amendment.

In the event there are any matters remaining in this application, the Examiner is invited to contact Matthew Shanley, Registration No. 47,074 at (703) 205-8000 in the Washington, D.C. area.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

MARKED-UP VERSION OF AMENDMENTS**IN THE ABSTRACT OF THE DISCLOSURE:**

The Abstract of the Disclosure has been amended as follows:

[The] A position determining device for a control knob [comprises] includes a relative position determiner [(e.g., an incremental rotary encoder)] and an absolute position determiner [(e.g., a potentiometer)]. The standard output data of the potentiometer corresponding to the rotational limits of the control knob is recorded in a ROM [on the] during manufacturing of the device. Since the device is activated until the potentiometer reaches one of the limits, the [operated] operating amount of the control knob is determined in accordance with absolute position data outputted from the potentiometer. When the potentiometer reaches one of the rotational limits [on the rotation] of the control knob, the standard data corresponding to the [reached one of the] rotational limits is read from the ROM and set as an initial value for the determination by [means of] the rotary encoder. Thereafter, the operated amount of the control knob is determined in accordance with relative position data outputted from the rotary encoder.

IN THE CLAIMS:

Claims 1-3 have been canceled.